pliance, particularly in elderly patients. 10 15 16 Depot treatment is as effective as daily treatment and has biochemical advantages: serum testosterone concentrations are lower and—unlike some daily treatments—implants are not followed by transient rises in serum luteinising hormone concentrations.17 Three monthly depot preparations are being developed, and given initially with an antiandrogen they may be an acceptable alternative to orchidectomy. 18

The first evidence that gonadotrophin hormone releasing analogues might be effective in breast cancer came in 1975, when one was shown to inhibit the growth of a rat mammary tumour.<sup>19</sup> In 1982 two of four premenopausal women with breast cancer responded to the gonadotrophin releasing hormone analogue buserelin. 20 Later 14 of 45 premenopausal women with breast cancer responded partially to either daily subcutaneous or monthly depot injections with the analogue goserelin.21 Patients without oestrogen receptors did not respond, and tumour flare was not seen. Four of 26 women in this study whose disease progressed while taking the analogue later responded to oophorectomy. Responses are also seen to analogues in postmenopausal women with breast cancer: 12 of 31 patients responded to leuprorelin,<sup>22</sup> one of 18 to buserelin<sup>23</sup>; and one of 12 to goserelin (A L Harris, personal communication). The biochemical basis for response is unknown. All these results require confirmation, but gonadotrophin hormone releasing analogues might prove useful in providing a reversible medical oophorectomy for premenopausal women with breast cancer.

Gonadotrophin hormone releasing analogues have been used in ovarian cancer. The first patient was described in 1985, and responded for one year.24 Since then six out of 36 patients have responded to a depot preparation of decapeptyl (H Parmar, personal communication).

About 80% of patients with advanced Hodgkin's disease are sterilised by combination chemotherapy, but some animal data suggest that gonadotrophin hormone releasing analogues given concurrently with chemotherapy may protect fertility.25 Unfortunately, a randomised trial has shown no protection, but the wrong analogue regimen may have been used.26

Gonadotrophin hormone releasing analogues have thus helped in studying how hormone dependent cancers respond to treatment, opened up the possibility of a "reversible" oophorectomy for premenopausal women with breast cancer, and provided an alternative to orchidectomy for men with prostatic cancer.

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- 1 Coy DH, Schally AV. Gonadotrophin releasing hormone analogues. Ann Clin Res 1978;10:
- 2 The Veterans Administration Co-operative Urological Research Group. Treatment and survival of patients with cancer of the prostate. Surg Gynecol Obstet 1967;124:1011-7.

  Lepor H, Ross A, Walsh PC. The influence of hormonal therapy on survival of men with advanced
- prostatic cancer. J Urol 1982;128:335-40.
- 4 Labrie F, Belanger A, Cusan L, et al. Antifertility effects of LHRH agonists in the male. J Androi 1980;1:209-28.
- 5 Tolis G, Ackman D, Stellos A, Mehta A, Labrie F, Fazekas AT. Growth inhibition in patients with prostatic cancer treated with luteinizing hormone releasing hormone agonists. Proc Nat Acad Sci USA 1982;79:1658-62.
- 6 Borgmann V, Nagel R. AL Abadi H, Schmidt-Gollwitzer M. Treatment of advanced prostatic
- Waxman JH, Wass JA, Hendry WF, et al. Treatment with gonadotrophin releasing hormone analogue in advanced prostatic cancer. Br Med J 1983;286:1309-13.
- 8 Allen JM, O'Shea JP, Mashiter K, Williams G, Bloom SR. Advanced of treatment with a gonadotrophin releasing hormone agonist. Br Med 7 1983;286:1607-9 9 Leuprolide Study Group. Leuprolide versus diethylstilboestrol for metastatic prostatic cancer. N Engl 7 Med 1984;331:1281-6.
- 10 Parmar H, Lightman SL, Allen L, Phillips RH, Edwards L, Schally AV. Randomized controlled study of orchidectomy versus long acting D-Trp-6-LHRH microcapsules in advanced prostatic carcinoma. *Lancet* 1985;ii:1201-5.

- 11 Garnick MB, Leuprolide versus diethylstilboestrol for previously untreated stage D2 prostate cancer. Urology 1986;27(Suppl):21-6
- 12 Parmar H. Edwards L. Phillips RH. Allen L. Lightman SL. Orchidectomy versus long-acting
- D-Trp-6-LHRH in advanced prostatic cancer. Br J Urol 1987;59:248-54.

  13 Waxman JH, Man A, Hendry WF, et al. Importance of early tumour exacerbation in patients treated with long acting analogues of gonadotrophin releasing hormone for advanced prostatic cancer. Br Med 7 1985:291:1387-8.
- , Dupont A, Belanger A, et al. Combination therapy with flutamide and castration (LHRH agonist or orchidectomy) in advanced prostatic cancer: a marked improvement in response and survival. J Steroid Biochem 1985;23:833-41.
- 15 Williams G, Kerle D, Griffin S, Dunlop H, Bloom SR. Biodegrable polymer luteinizing ho releasing hormone agonist for prostatic cancer: use of a new peptide delivery system. Br Med 7 1984:289:1580-1
- 16 Waxman JH, Sandow J, Man A, et al. The first clinical use of depot buserelin for advanced
- prostatic carcinoma. Cancer Chemother Pharmacol 1986;18:174-5.

  17 Kerle D, Williams G, Ware H, Bloom SR. Failure of long-term luteinizing hormone releasing hormone treatment for prostatic cancer to suppress serum luteinizing hormone and testosterone Br Med 7 1984:289:468-9
- 18 Fraser HM, Sandow J, Seidel H, Von Rechenberg W. An implant of a gonadotrophin releasing hormone agonist (buserelin) which suppresses ovarian function in the Macaque for 3 to 5 months. Acta Endocrinol (in press).
- 19 De Sombre ER, Johnson ES, White WF. Regression of rat mammary tumours effected by a gonadoliberin analog. Cancer Res 1976:36:3830-3.
- 20 Klijn JG, De Jong FH. Treatment with a luteinising hormone releasing hormone analogue (buserelin) in premenopausal patients with metastatic breast cancer. Lancet 1982;ii:1213-6. 21 Williams MR, Walker KJ, Turkes A, Blamey RW, Nicholson RI. The use of an LH-RH agonist
- (ICI 118630, Zoladex) in advanced premenopausal breast cancer. Br J Cancer 1986;53:629-36.

  22 Harvey HA, Lipton A, Santen RJ, et al. Phase II study of a gonadotrophin-releasing hormone
- analog (Leuprolide) in postmenopausal advanced breast cancer patients. Proceedings of American Society of Clinical Oncology/Annals of the Association of Cancer Research 1981:C436. 23 Waxman JH, Harland SJ, Coombes RC, et al. The treatment of postmenopausal women with
- advanced breast cancer with buserelin. Cancer Chemother Pharmacol 1985;15:171-3.
- 24 Parmar H, Nicoll J, Stockdale A, et al. Advanced ovarian carcinoma: response to the agonist D-Trp-6-LHRH. Cancer Treat Rep 1985;69:1341.
  25 Glode LM, Robinson J, Gould SF. Protection from cyclophosphamide-induced testicular damage
- with an analogue of gonadotrophin-releasing hormone. Lancet 1981;i:1134-5
- 26 Waxman JH, Ahmed R, Smith D, et al. Failure to preserve fertility in patients with Hodgkin's disease. Cancer Chemother Pharmacol 1987;19:159-62.

## Self injury and mental handicap

Whereas suicidal attempts are rare among the mentally handicapped, self injury is common. To cite two personal examples, in one case a boy in a hospital for mentally retarded children died; at necropsy a piece of an old fashioned tin toy was found to have lodged in the oesophagus, whence it had cut into the aorta. In the second case an ingested roll of film had obstructed the terminal ileum. At this level of intelligence (a quotient of 70 or under) there is frequently an undifferentiated appetite, with a "vacuum cleaner" effect. Indiscriminate eating may produce toxic concentrations of lead in the blood in the already mentally handicapped and occasionally selective pica for lead is a prime cause of the handicap.1

Uncommonly self injury is an actual component of a condition, such as congenital insensitivity to pain<sup>2</sup> or the Lesch-Nyhan syndrome.34 More usually there is no such link and the self injury results from the impact of an unfavourable environment on a damaged nervous system. In a study in a health region in south east England Oliver et al identified 606 self injuring mentally handicapped people and screened 596 of them.5 The types of self injury were very varied: banging the head or body; biting the hands, lips, and fingers or toes; picking and scratching the skin; or poking the eyes and other orifices. Hospital residents inflicted considerably more injury on themselves than those living in hostels and, particularly, those living at home, though the three groups were not comparable for age or degree of handicap.

Self injury seems to be attention seeking and sometimes to be generated by sheer boredom and the lack of other activity or stimulus. All who have worked in mental handicap will know of the problems of overcrowding and understaffing, so it is disturbing to find the absence of any programmed activity for two fifths of the hospital patients studied by Oliver et al, despite the amount of publicity given to these hospitals in recent years. Self injury carries a serious risk of permanent damage, such as subdural haemorrhage, blindness, or deformity-or even death-and hence not surprisingly patients are treated with tranquillisers and different forms of physical restraint. 6 Thus no fewer than two thirds of the hospital patients in this study were receiving psychotropic drugs, usually long term; many were also wearing protective devices.

As the authors of this survey emphasised, skills may be lost as a result of the long term use of physical restraints6 and drugs are ineffective for treating self injurious behaviour.7 Only 12 of their 596 patients had had written psychological programmes to correct their abnormal behaviour, yet these are known to provide the most effective treatment possible, by providing alternative stimulation and activity as well as positive reinforcement of normal behaviour.8 Unfortunately there is still a grave shortage of people trained in using these methods for treating the distressing problem of self injury.

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- 1 Bicknell DJ. An investigation into the aetiology and ill effects of pica in childhood. In: Clayton BE, n: environmental hazards. London: Butterworth, 1973:89-107
- 2 Kirman BH, Bicknell DJ. Congenital insensitivity to pain in an imbecile boy. Dev Med Child Neurol 1968:10:57-63.
- 3 Lesch M, Nyhan WLA. A familial disorder of uric acid metabolism and central nervous system function. Am J Med 1944;36:561-70.

  4 Shear CS, Nyhan WL, Kirman BH. Self-mutilating behaviour as a feature of the De Lange
- syndrome. J Pediatr 1978;78:506-9.

  5 Oliver C, Murphy GH, Corbett JA. Self-injurious behaviour in people with mental handicap: a total

- 5 Oliver C, Murphy CHT, Corbett JA. Self: injurious benaviour in people with mental nandicap: a total population study. J Ment Defic Res (in press).
   6 Spain B, Hart SA, Corbett J. The use of appliances in the treatment of self-injurious behaviour. In: Murphy G, Wilson B, eds. Self-injurious behaviour. Kidderminster: BIMH Publications, 1985.
   7 Williams DE, Weir HF, Hargrave KL, Parker CM, Marek K. Effects of a facility-wide psychoactive drug evaluation behaviour management system. In: Griffin JC et al., eds. Advances in the treatment of self-injurious behaviour. Austin, Texas: Planning Council for Developmental
- 8 Murphy G, Wilson B. Self injurious behaviour: a collection of papers on prevalence, causes, and treatment in people who are mentally handicapped or autistic. Kidderminster: BIMH Publications,

## From Vesalius to telefax: 100 years of the BMA library

Everything changes, wrote Gertrude Stein, but not without a reason. Medical journals of 100 years ago certainly had a different style from now-"Before coming to facts, I should like to give expression to some thoughts which have been floating in my mind," wrote Angel Money, starting an original article in the  $BM\mathcal{J}$  in 1887. What is most surprising, however, is how few references were cited: entire journals then had fewer references than does today's average paper, which is why medical libraries are now so important.

In the typical paper of a century ago one man shared the wealth of his experience with all who might care to benefit from it. Many papers started life as speeches, and at their worst they had the tone of a bar room bore haranguing the customers. Before sitting down to write today's doctors consult "the literature," in some cases everything that has been written on their subject. Papers now resemble animated conversations: other points of view are considered and rebutted or accepted. Messages, sometimes explicit, sometimes coded, are sent out to other workers. Monologue is out. In place of one man and his dogma we have the chat show.

To join in the conversation means having access to others' opinions, and as no one person or department can afford subscriptions to all the relevant journals this presupposes a library. It is the medical library that allows the conversation to take place. Given this it seems surprising that an association committed to the diffusion and increase of medical knowledge could still have no library 50 years after its formation. A committee of the Provincial Medical and Surgical Association (the BMA's precursor) looked into the possibility of establishing a library in 1834 but decided against it on three main grounds: the expense, the space required, and the problems of access for its members.

Nothing happened until 1887, when Ernest Hart, then editor of the BM7, recommended to the council of the BMA that a library should be formed and offered to start it with a collection of his own books (including Vesalius's De Humani Corporis Fabrica). He became the library's first librarian and pledged books sent to the journal for review and arranged to exchange the BM7 with other journals (practices which continue today).

The library was such a transparently good idea that once started it has never looked back: its current holdings are of over 30 000 books and 2000 sets of periodicals—over 1200 of which are currently taken. Another 23 databases are available for searches. Members of the BMA unable to visit the library may borrow books and request photocopies and searches by post. The libraries of over 200 postgraduate medical centres are institutional members of the library, allowing them to augment their limited stocks by calling on its resources. With Telecom Gold, mailbox (74: BMX030) messages can be left for the library at any time from anywhere in the world. Telefax (01 388 2544) provides a similar service but can also be used to send photocopies of articles anywhere. As the movable type was to Vesalius's world so the microchip is to ours: it leaves the muscle men of the De Humani for dead.

Problems of access to the library's facilities for BMA members wherever they are seem finally to have been solved, and after spending much of its last 100 years on the move a suitable space may at last have been found for the library too. Abandoning the site where Charles Dickens lived from Bleak House to Great Expectations, the library ascended two years ago into what was designed by Sir Edwin Lutyens as a temple for the Theosophists.

Of the three problems mentioned by the committee of the Provincial Medical and Surgical Association in 1834 only the one of expense remains—and seems likely to do so. Otherwise, it makes no sense to predict what form the library's future will take. After all, 100 years ago Ernest Hart's view of library science was suitable shelving, and now their contents are whizzing through the ether at 186 000 miles a second.

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